ANNEXURE-I

Bengaluru Metropolitan Transport Corporation (BMTC)

Tender No. BMTC/2024-25/SE0730/Call2

Date: 19-03-2025

Pre-Bid responses of

SELECTION OF TECHNOLOGY SOLUTION PROVIDER FOR

Supply, Commissioning and Maintenance of

Smart Electronic Ticketing Machines

With Comprehensive Ticketing Solution on Rental Basis

March 2025

Sl No	Company	Clause reference and Title	Page number	Clause Description	Query of the Applicant / Clarification sought by the Applicant (Change request)	Reason for change request	BMTC Response
1	MicroFx Pvt Ltd	9. Pre-Qualification Criteria RFP	Page No: 18, Point No: 2 Annual Turnover	The bidder should have cumulative turnover of minimum INR 50 crores for any three (3) financial years, out of preceding last five (5) audited financial years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24). During these three(3) financial years, the annual turnover should be minimum INR 10 crores • Bidder in case of sole bidder. • Prime Bidder in case of Consortium	The bidder should have cumulative turnover of minimum INR 50 crores for any three (3) financial years, out of preceding last five (5) audited financial years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24). During these three(3) financial years, the annual turnover should be minimum INR 10 crores • Bidder in case of sole bidder. • Any Member in case of Consortium	For Better Rates	Please refer Addendum.
2	MicroFx Pvt Ltd	9. Pre-Qualification Criteria (Addendum)	Page No: 4, Point No: 5 Experience in ETM ticketing and Web based centralized fare collection application and Digital Payment through ETMs.	The bidders should have supplied and implemented at least a total of 2500 Nos. of ETMs enabled with any mode of digital payments to State Transport undertaking in India over the last five (5) years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 ETMs enabled with any mode of digital payments in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any modes of digital payment through ETMs and integration with payment gateway. Bidder in case of sole bidder. Both or any member in case of Consortium	The bidders should have supplied and implemented at least a total of 2500 Nos. of ETMs enabled with any mode of digital payments to State Transport undertaking in India over the last five (5) years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 ETMs enabled with any mode of digital payments in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any modes of digital payment through ETMs Bidder in case of sole bidder. Both or any member in case of Consortium	To have more competitive bids with best rates (KSRTC Karnataka has changed the same in Addendum)	Please refer Addendum.
3	MicroFx Pvt Ltd	I.Payment Terms and Conditions	Page No: 128, Point No: 8 Computer and Printer Supply	8) Selected bidder shall provide Web based centralized fare collection software, Cloud hosting, ETM and ETM services along with charger, pouches, SAM, battery, printer, scratch free tough rugged screen, 2 computers(minimum i5 processor, 1 TB harddisk, 8 GB RAM, Windows 11, 21 inch monitor) & 2 dotmatrix printers (136 column) per depot and SIM card & and connectivity.	8) Selected bidder shall provide Web based centralized fare collection software, Cloud hosting, ETM and ETM services along with charger, pouches, SAM, battery, printer, scratch free tough rugged screen per depot and SIM card & and connectivity.	Request removal of computers and dot-matrix printers from ETM Tender, since this is brought out office equipment	RFP Condition prevails.
4	Quantum Power Systems	BMTC_RFP final	18	The bidders should have supplied and implemented at least a total of 2500 Nos.of Smart ETMS to StateTransport undertaking in India over the last five (5)years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 Smart ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 Smart ETMs in last fiveyears with maximum of three orders.Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any modes of digital payment through ETMs and integration with payment gateway. Bidder in case of sole bidder. Both or any member in case of Consortium.	We request you to consider any ETMs to State Transport Undertaking. The bidders should have supplied and implemented at least a total of 2500 Nos. of ETMs to StateTransport undertaking in India over the last Six (6) years (2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 Smart ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 Smart ETMs in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any modes of digital payment through ETMs and integratlon with payment gateway. Bidder in case of solebidder. Both or any member in case of Consortium.		Please refer Addendum.
5	Quantum Power Systems	BMTC_RFP final	Page 24 Technical Proposal	A.Previous Experience:Successfully supplied and implemented Android based smart ETMs enabled with digital payment features over the last five. years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders.i. Supply of 2500-5000 Smart ETMs - 5 Marks. Supply of 5001 and above Smart ETMs - 10 Marks	A. Previous Experience: Successfully supplied and implemented smart ETMs enabled with digital payment features over the last six years (2018-2019, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. A. Supply 2500-4000 Smart ETMs - 5 Marks B. Supply of 4000 and above Smart ETMs - 10 Marks.		Please refer Addendum.
6	Quantum Power Systems	BMTC_RFP final	Page 2	Last date and time for bid submission/uploading of Bid, 21.03.2025 @11:30 hrs	We request to postpone the bid submission to 15 days from the date of the reply of pre-bid query.		Please refer KPPP portal for information

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7	Iteration	Pre Qualification Criteria Point no-5	18	The bidders should have supplied and implemented at least a total of 2500 Nos. of Smart ETMs to State Transport undertaking in India over the last five (5) years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum or three orders.	Please consider 1000 ETMs and financial 2024- 25		RFP Condition prevails.
8	Iteration	Tehnical Proposal Point no. 2 Technical Capabiiity	24	A. Previous Experience: Successfully supplied and implemented Android based smart ETMs enabled with digital payment features over the last five years (2019-20, 2020-21. 2021-22, 2022-23, 2023-24) in single or in maximum or three orders.	Please consider financial year 2024-25. Also consider instead of Android ETM can consider any smart ETM.		RFP Condition prevails.
9	Iteration	Tehnical Proposal Point no. 2 Technical Capabiiity	24	B. Domain Knowledge: The bidders should have supplied and implemented at least a total of 2500 Nos. of Smart ETMs to State Transport undertaking in India over the last five years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three Orders 1) ETMs supplied to State Transport Undertakings 2) ETMs supplied and implemented with digital payment feature. Integration of Smart ETMs with Centralized fare collection Application.	Ptease consider 1000 ETMs and financial 2024- 25.		RFP Condition prevails.
10	Pine Labs	Experience in ETM ticketing and Web based centralized fare collection application and Digital Payment through ETMs.	17	The bidders should have supplied and implemented at least a total of 2500 Nos. of Smart ETMs to State Transport undertaking in India over the last five (5) years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 Smart ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 Smart ETMs in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any modes of digital payment through ETMs and integration with payment gateway. Bidder in case of sole bidder. Both or any member in case of Consortium	Copy of purchase orders from State Transport Undertaking/ System Integrator. Copies of Delivery Challan/ Invoices for the proof of supply of at least 2500 nos. of Smart ETMs to State Transport Undertaking in India. Certificates from STUs with regard to successful implementation of Ticketing solution & Digital payment.	Humble request Besides State Transport to please consider Metropolitan and City Transport Corporation. Humble request to consider Digital Paymets experience of other Merchants too besides Transit. Would request if 1000 Can be consider.	Please refer Addendum.
11	Pine Labs	1. Scope Summary	106	• Supply of 5G data service enabled SIM cards for real time data transfer of revenue data to Central Cloud Server.		Humble request to Consider 4G as devices are enabled with 5G However lacks connectivity at multiple locations	RFP has clarity.
12	Pine Labs	(A) ETM Hardware Specification Battery	63	a) Min. 24 Wh or higher, capable of operating minimum of 16 hours in operation mode per single charge (minimum 16 Hours of battery backup) which includes 72 hours of sleep/ power saver mode.		Requesting your clarification 1. Please provide discription in Mh and V for better understing 3. The same project can work with 3000 Mh and 7.4V	RFP Condition prevails. Note: Watt Hours(Wh) = Amp Hours(Ah) * Volts(V). Any combination of Ah and V can be used to derive the desired min 24 Wh
13	Pine Labs	Other Requirements	64	a) Change of any hardware part of ETM should not lead to the change in machine serial number and it should be stored internally in the encrypted form apart from being physically embossed on the outer case of ETMs.		Sir we would be replacing device till the time our device is of the project for servicing. Sr no would change but no of required devices will stay in	RFP Condition prevails.
14	Pine Labs	Other Requirements	64	a) Charger should have logo of BMTC.		As discussed requesting to keep a sticker instead of embosing the logo	RFP Condition prevails.
15	Pine Labs	Other Requirements	64	i) Pouches to be replaced every year in all the ETMs.		Should be changed as per the need basis. Else of the cost of the device would increase.	RFP Condition prevails.
16	Pine Labs	Annual Turnover	2	The bidder should have cumulative turnover of minimum INR 50 crores for any three (3) financial years, out of preceding last five (5) audited financial years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24). During these three(3) financial years, the annual turnover should be minimum INR 10 crores · Bidder in case of sole bidder. · Prime Bidder in case of Consortium.	Audited financial statements for last five (5) financial years. Certificate from the Chartered Accountant/ Statutory Auditor on turnover details over the last five (5) audited financial years.	Humble request to corporation to kindly permit Average Annual Turnover of Bidder / Consortium Partner to be INR 10 Cr in last three financial years.	Please refer Addendum.

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17	Pine Labs	Keypad	63	a) Virtual Keypad / Touch Screen with Soft Keys. b) Optional physical keypad with minimum keys required for ticketing including numerals, functional and navigational keys. c) Physical keypad should be detachable and replaceable. d) Keys shall be in different colors differentiating numerals, functions etc., in case the machine has physical keypad.		ETIM specifications should be kept general and should not be specific on Keypad requirements and acceptability.	Please refer Addendum.
18	OMNIFICENT TECHNOLOGIES PVT LTD	Clause No 9 Pre-Qualification Criteria	17	Annual Turnover The bidder should have cumulative turnover ofminimum INR 50 crores for anythree (3) financial years, out of preceding last five (5) audited financial years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24).During these three (3) financial years, the annual turnover should be minimum INR 10 crores	We request Corporation to keep Bidders Average Annual Turnover of three years out of Five years as INR 10Cr With cumulative turnover of any three years to be INR 30 Cr.This will enable MSME registered companies and Indian OEMs with relevant experience to participate in the bid process.		Please refer Addendum.
19	OMNIFICENT TECHNOLOGIES PVT LTD	TQM Form 3 Compliance toTechnical and Functional Requirements	65	(A) ETIM Hardware Specifications Point no 13 Communication Interface a) RS232 Serial Port at 115K baud rate (optional) e) 5G LTE, Fall back 2G	We request Corporation to allow devices with 4G LTE, fallback 2G as not all devices are equipped with 5G LTE. As for the communication port most Android devices have built-in wifi for communication and C port for wired communication. RS232 was used for Embedded Linux devices.		RFP has clarity.
20	OMNIFICENT TECHNOLOGIES PVT LTD	TQM Form 3 Compliance to Technical and functional requirement & Annexure 1 - : ETM Hardware and Functional Specifications	Page no 63 & Page no. 82	Keypad a) Virtual Keypad / Touch Screen with Soft Keys. b) Optional physical keypad with minimum keys required for ticketing including numerals, functional and navigational keys. c) Physical keypad should be detachable and replaceable. Keys shall be in different colors differentiating numerals, functions etc., in case the machine has physical keypad. Display: b) Minimum of 5" rugged LCD touch screen display with Virtual Keypad OR Minimum 4" rugged LCD touch screen display along with Physical Keypad	For last many years, all the ETIMs used by the conductors are with Physical Keypad. Hence Physical Keypad is an additional and optional feature which benefits the conductors for ticketing. Hence, ETIMs with additional keypads should not be restricted from participation. We request Corporation to consider Physical Keypad as repairable keypad & not detachable keypad. This is as per PCI requirement and Norms.		Please refer Addendum.
21	OMNIFICENT TECHNOLOGIES PVT LTD	TQM Form 3 Compliance toTechnical and functional requirement & Annexure 1 : ETM Hardware and Functional Specifications	62 & 82	TQM Form 3 on page no 62 and Annexure I on page no 82 : ETM Hardware and Functional Specifications are exact same.	Pls clarify if declaration for both required		Declaration required for both.
22	OMNIFICENT TECHNOLOGIES PVT LTD	Clause no 3: Detailed scope of work	111	The selected bidder is responsible for arranging defective devices to be taken from the depots to the service centre/company and returning the same after service at his own cost and risk	We request corporation to make arrangement for delivery of faulty ETIMs from Depot to Service centre and back to depots upon repair of the ETIMs. This is a normal practice followed by most of the corporations.System Integrator will be responsible for timely repair of ETIMs		RFP Condition prevails.
23	OMNIFICENT TECHNOLOGIES PVT LTD	Payment Terms and Conditions	122	Point 1 a: Supply of New ETMs loaded with firmware and activated 5G SIM card , 2 personal computers and 2 dot matrix printers per depot as per BMTC requirements,	Request corporation to clarify if the supply of Hardware like Desktop computers and printers in in the scope of System Integrator. If so the BOQ must have details of qty and detailed specifications. There is a requirement of Hardware like Computers and Printers to be supplied. There is no value add by system integrator here. BMTC can get better price for procurement directly here. Hence, we request to keep scope of depot hardware out of the scope of supply.		RFP Condition prevails.
24	OMNIFICENT TECHNOLOGIES PVT LTD	Payment Terms and Conditions	123	Repair cost of the ETM shall be borne by BMTC in case of physical damage of the ETM when in BMTC custody and no monthly rental payment shall be made from the reporting day of the damage till the ETM is brought back to working condition/ replaced.	We request corporation to consider Damages as Physical as well as Electrical Damages. Many a times the Motherboard PCB of the ETIM is damaged due to charging with unauthorized and faulty chargers. Hence, we request corporation to consider Damage both physical and electrical damages like pcb burning under Damages for re-imbursement by BMTC		RFP Condition prevails.

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25	OMNIFICENT TECHNOLOGIES PVT LTD	Payment Terms and Conditions	123	Point 8 : Selected bidder shall provide Web based centralized fare collection software, Cloud hosting, ETM and ETM services along with charger, pouches, SAM, battery, printer, scratch free tough rugged screen, 2 computers (minimum i5processor, 1 TB hard disk, 8 GBRAM, Windows 11, 21 inchmonitor) & 2 dot-matrix printers(136 column) per depot and SIMcard & and connectivity.	Request corporation to clarify if the supply of Hardware like Desktop computers and printers in in the scope of System Integrator. If yes, the BOQ must have details of qty and specifications. There is a requirement of Hardware like Computers and Printers to be supplied. There is no value add by system integrator here. BMTC can get better price for procurement directly here. Hence, we request to keep scope of depot hardware out of the scope of supply		RFP Condition prevails.
26	OMNIFICENT TECHNOLOGIES PVT LTD	II. General Conditions of Contract	128	Point 5 : Performance Bank Guarantee An amount equal to 10% of the Estimated Total Contract Value to be submitted as Bid Security within 10 days from thedate of issue of Letter of Intent.	We request corporation to consider BG of 5 % of total contract value within 10days of issuance of LOI.		Please refer Addendum.
27	OMNIFICENT TECHNOLOGIES PVT LTD	Clause reference and Title G. Project Implementation Timelines and Deliverables	116	System Study & Implementation Plan T1: T0 + 10 days -ETM Software and centralized web based fare collection software Development T2: T1 + 25 days -Testing, Pilot implementation in one/two depot identified by BMTC and declaration of Pilot Go-Live. T3: T2 + 10 days -Supply and commissioning of Electronic Ticketing Machines (ETMs) along with ETM Software and centralized web based fare collection software. Final Go-live T4: T3 + 30 days Operation and Maintenance of the Project T5: 48 Months from the date of Go-Live, extendable by another 12 months as per RFP terms and conditions.	We request corporation to keep implementation time realistic and request to provide timelines as below : '-System Study & Implementation Plan T1: T0 + 15 days -ETM Software and centralized web based fare collection software Development T2: T1 + 45 days -Testing, Pilot implementation in one/two depot identified by BMTC and declaration of Pilot Go-Live. T3: T2 + 15 days -Supply and commissioning of Electronic Ticketing Machines (ETMs) along with ETM Software and centralized web based fare collection software. Final Go- live T4: T3 + 50 days Operation and Maintenance of the Project T5: 48 Months from the date of Go-Live, extendable by another 12 months as per RFP terms and conditions.		RFP Condition prevails.
28	Namma Yatri	10. Eligibility Point c	20	...and, in the event the Consortium is awarded the contract, during contract execution maximum number of members allowed in the Consortium is limited to **TWO.**	Request BMTC to allow three-member consortiums for greater flexibility and enabling bidders to form stronger partnerships with specialized expertise. This will also allow startups like us to collaborate with industry leaders, bringing in cutting-edge technology, domain expertise, and operational efficiency to deliver the best and cost-effective solution for BMTC, its employees and passengers.		RFP Condition prevails.
29	Namma Yatri	9. Pre-Qualification Criteria - 1,2,3,4,5 and 10. Eligibilty Point d	17 -19 and 20	Pre-Qualification Table and Average annual turnover of more than Rs. 50 Crores for any three (3) financial years, out of preceding last five (5) audited financial years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24). **In case of Consortium, the Prime Bidder shall have the requisite financial qualifications.**	Request BMTC to allow any member of the consortium to fulfill the turnover, net worth, Pre-Qualification, and Technical Qualification criteria, rather than restricting it solely to the Prime Bidder. It will also enable startups like us to collaborate with established OEMs and domain specialists, ensuring a technically sound, cost-effective and innovative solution for BMTC.		RFP Condition prevails.
30	Namma Yatri	Section-1.Letter of Invitation	11	BMTC invites proposals for Selection of Technology Solution Provider for Supply, Commissioning and Maintenance of Smart Electronic Ticketing Machines (ETMs) with comprehensive Ticketing Solution on rental basis for BMTC. The scope includes supply, implementation, commissioning, maintenance of ETMs along with development, deployment and maintenance of comprehensive Ticketing Solution for BMTC for successful implementation of the project BMTC intends to select the Solution Provider through an open competitive bidding process in accordance with the procedure set out herein.	Request BMTC to expand the scope of work to include a comprehensive Automated Fare Collection System (AFCS) with mobile ticketing, and mobile pass issuance app. These enhancements will streamline operations by reducing manual ticket issuance inside the bus, cut paper roll costs which will save cost for BMTC. With increasing smartphone adoption and commuter preference for digital payments, enabling UPI and QR-based fare collection will enhance efficiency, accelerate cashless adoption and improve the overall commuter experience.		RFP Condition prevails.
31	Ebix Cash	9. Pre-Qualification Criteria	17	Consortium.	**Consortium should not be allowed** as otherwise there is no single ownership leading to failures in bigger & complex projects. Multiple entities cause problems in integrations & in sharing of work.		RFP Condition prevails.

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32	Ebix Cash	9. Pre-Qualification Criteria	18	Certification The bidder should hold ISO certificates as below: • ISO 9001:2015 or Higher Quality Management • ISO 20000-1:2018 IT Service Management System(preferred) • ISO 27001: 2013 IT Security Management System. The bidder needs to submit this Certificate on or before Go-Live of the Project. • Bidder in case of sole bidder. • Any member in case of Consortium.	Certification The bidder should hold ISO certificates as below: • ISO 9001:2015 or Higher Quality Management • ISO 20000-1:2018 IT Service Management System. **This should be compulsory. Kindly define what preference will be given to bidder for having this certificate.** • ISO 27001: 2013 IT Security Management System. and • **CMMI Level 3 or higher** • Bidder in case of sole bidder. • Any member in case of Consortium. **Justification:** CMMI level 3 is necessary due to the fact that one of the major component is software.		RFP Condition prevails.
33	Ebix Cash	9. Pre-Qualification Criteria	18	The bidders should have supplied and implemented atleast a total of 2500 Nos. of ETMs enabled with any mode of digital payment to State Transport undertakings in India over the last five (5) (2019-20, 2020-21, 2021-22, 2022-23, 2023-24)in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 ETMs enabled with any mode of digital payment in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any mode of digital payment through ETMs and integration with payment gateway. • Bidder in case of sole bidder. • Both or any member in case of Consortium. Copy of Purchase Orders from State Transport Undertaking **/ System Integrator.** Copies of Delivery Challan/ Invoices for the proof of supply of at least 2500 nos. of ETMs enabled with any mode of digital payment to State Transport Undertaking in India. Certificates from STUs with regard to successful implementation	The bidders should have supplied and implemented atleast a total of 2500 Nos. of **smart ETMs** enabled with any mode of digital payment to State Transport undertakings in India over the last **Seven (7) (2018-19**, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, **2024-25)**in single or in maximum of three orders. The orders on CAPEX model or RENTAL model or Combination of both CAPEX and RENTAL shall be considered. For example: The bidder has supplied and implemented 1000 ETMs in 2019-20, 500 in 2020-21 and 1000 in 2022-23, the bid will be considered as the bidder has supplied and implemented at least 2500 ETMs enabled with any mode of digital payment in last five years with maximum of three orders. Bidders shall have experience in designing and handling ticketing and web based centralized fare collection application. Bidder shall have experience in any mode of digital payment through ETMs and integration with payment gateway. • Bidder in case of sole bidder. • Both or any member in case of Consortium. **Copy of Purchase Orders from State Transport Undertaking.** Copies of Delivery Challan/ Invoices for the proof of supply of at least 2500 nos. of **smart ETMs** enabled with any mode of digital payment to State Transport Undertaking in India. Certificates from STUs with regard to successful implementation of Digital payment on **Smart ETM's.**		Please refer Addendum.
34	Ebix Cash	9. Pre-Qualification Criteria	19	Software Development Centre The bidder should have a registered office at Bengaluru or shall establish the same within 60 days from the date of issue of Purchase Order. The selected bidder shall submit the official documents of established office to BMTC along with name, designation and contact details of working staff. • Bidder in case of sole bidder. • Any member in case of Consortium.	**Establishment of office / Service Center** The bidder should have a registered office at Bengaluru or shall establish the same within 60 days from the date of issue of Purchase Order. The selected bidder shall submit the official documents of established office to BMTC along with name, designation and contact details of working staff. • Bidder in case of sole bidder. • Any member in case of Consortium.		RFP Condition prevails.

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35	Ebix Cash	12. Technical Proposal	24	2 Technical Capability A. Previous Experience: A. Previous Experience: Successfully supplied and implemented ETMs enabled with any mode of digital payment over the last five years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. i. Supply of 2500-5000 Smart ETMs - 5 Marks ii. Supply of 5001 and above Smart ETMs - 10 marks	2 Technical Capability A. Previous Experience: Successfully supplied and implemented **Android based smart ETMs** enabled with digital payment features over the **last Seven years (2018-19**,2019-20, 2020-21, 2021-22, 2022-23, 2023-24, **2024-25)** in single or in maximum of three orders. i. Supply of 2500-5000 **Smart ETMs** - 5 Marks ii. Supply of 5001 and above **Smart ETMs** - 10 Marks **Justification** : In view of the project requirement of **Android ETMs,** the bidder must have supplied **Andriod Smart ETMs** to State Transport		Please refer Addendum.
36	Ebix Cash	12. Technical Proposal	24	B. Domain Knowledge: The bidders should have supplied and implemented at least a total of 2500 Nos. of ETMs to State Transport undertakings in India over the last five years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders. i. ETMs supplied to State Transport Undertakings ii. ETMs supplied and implemented with digital payment feature. iii. Integration of Smart ETMs with Centralized fare collection Application.	B. Domain Knowledge: The bidders should have supplied and implemented at least a total of **2500 Nos. of Smart ETMs** to State Transport undertaking in India over the **last Seven years (2018-19**, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, **2024-25)** in single or in maximum of three orders. i. ETMs supplied to State Transport Undertakings ii. ETMs supplied and implemented with digital payment feature. iii. Integration of Smart ETMs with Centralized fare collection Application.		Please refer Addendum.
37	Ebix Cash	12. Technical Proposal	26	iii. Dashboard Features • Should demonstrate facility to generate real time revenue collection and ticket issued details. • Should be able to display information on total number of ETMs in operation. • Tracking of ETM geo location. • Graphical/ Chart representation of ticket data. • **Look and feel of Dashboard.** • Show the Battery Status of ETMs. • Reporting and Data Analytics. **10 Marks**	**We request Corporation to remove last point of Dashboard Feature** **• Look and feel of Dashboard.** As this point can't be quantified, look & feel depends upon every individual perseption. Hence we request you to replace with with inspector login point. **Also, there are 10 marks against 7 points. Humble request to kindly provide marks against each point.**		Please refer Addendum.
38	Ebix Cash	17. Format and Signing of Proposal	28	b) A copy of the Power of Attorney certified under the hands of a partner or director of the Applicant and notarized by a notary public in the form specified in RFP Document shall accompany the Proposal.	17. Format and Signing of Proposal b) A copy of the Power of Attorney certified under the hands of a partner or director or **Company Secretary** of the Applicant and notarized by a notary public in the form specified in RFP Document shall accompany the Proposal.		RFP Condition prevails.
39	Ebix Cash	PQ FORM 2: Bid Submission covering Letter	44	20 Establishment of software development center in Bengaluru	**Establishment of office / Service Center**		RFP Condition prevails.
40	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	63	(A) ETM Hardware Specification Processor 64 bit processor with minimum 1 GHz speed.	Processor 64-bit processor with minimum **2 GHz** Speed.		RFP Condition prevails.

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41	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	63	OS Android 9 or higher.	OS **Android 11 or higher.** **As currently STU's are using andriod 11, hence it should be same or higher.**		RFP Condition prevails.
42	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	64	Display b) Minimum of 5" rugged LCD touch screen display with Virtual Keypad OR Minimum 4" rugged LCD touch screen display along with Physical Keypad	Display b) **Minimum of 5" rugged LCD touch screen display with Virtual Keypad** **We request you to define the screen size, so that all bidders supply machine of same size. We request BMTC to finialise 5' inch screen as conductors are more prone to 5 ich screen as compared to 4' inch screen with no physical keypad. Yes their are machines avaliable in market with detachable physical keypad.**		RFP Condition prevails.
43	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	64	6 Keypad a) Virtual Keypad / Touch Screen with Soft Keys. b) Optional physical keypad with minimum keys required for ticketing including numerals, functional and navigational keys. c) Physical keypad should be detachable and replaceable. d) Keys shall be in different colors differentiating numerals, functions etc., in case the machine has physical keypad.	(A) Technical Specifications of ETM Features of Keypad 1. Keypad shall be virtual keypad on touch screen. **There should not be any physical keypad.**		Please refer Addendum.
44	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	65	13 Communication Interface e) 4G LTE or higher, fallback 2G.	Communication Interface e) **4G/**4G LTE or higher, fallback 2G.		RFP Condition prevails.
45	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	65	Battery b) Li-ion/ Li-polymer internal battery with protection against explosion while handling as per the Safety Standards and Regulations. c) Battery should be compliant with IEC 62133, ISO 12405 & all other Battery Cell Safety Standards and Regulations to be followed as and when revised.	**b) Battery package shall be as per latest industry standards.** **C) Battery should be compliant with IEC 62133**		RFP Condition prevails.
46	Ebix Cash	TQ FORM 3: Compliance to Technical and Functional Requirements.	66	Certifications a) EMV Level 1 certified, Level 2 and 3 will be required at the time of implementation. Note: Only L3 Certification will be obtained by BMTC during implementation.	Certifications a) **EMV Level 1 & 2 certified** and Level 3 will be required at the time of implementation. Note: Only L3 Certification will be obtained by BMTC during implementation.**The cost towards the same will be borne by BMTC.**		RFP Condition prevails.

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47	Ebix Cash	(C) ETM Software Requirement (Bus Ticketing)	77	iii. Contactless Smart Card Software	We need clarity on Smart Card software. 1. How many Smart card of BMTC are in market. 2. What are the specification of existing smart Card. 3. Will your existing smard card vendor will provide Card keys for integration. This would be the responsibility of BMTC. 4. The IT infrastructure (Hardware) will be borne by BMTC.		During implementation of Smart cards details will be intimated.
48	Ebix Cash	f) Integration with other IT sub-systems	110	ii) BMTC may come up with the Financial Institution for introduction of National Common Mobility Card (NCMC). The bidder shall be responsible for integration of ticketing system with futuristic Bank Host system for National Common Mobility Card (NCMC) and reconciliations.	ii) BMTC may come up with the Financial Institution for introduction of National Common Mobility Card (NCMC). The bidder shall be responsible for integration of ticketing system with futuristic Bank Host system for National Common Mobility Card (NCMC) and reconciliations. **The cost toward the same will be borne by respective bank appointed by BMTC for all certifications.**		RFP has clarity.
49	Ebix Cash	f) Integration with other IT sub-systems	110	ii) BMTC may come up with the Financial Institution for introduction of National Common Mobility Card (NCMC). The bidder shall be responsible for integration of ticketing system with futuristic Bank Host system for National Common Mobility Card (NCMC) and reconciliations.	**We request this responsibility should also be given to Bidder.**		RFP has clarity.
50	Ebix Cash	o) Payment Gateway Services	117	• The consumer service center provided to consumer for payment information and payment issues should be available 24x7. Popular media like toll free, email, sms should be used to record citizen payment issues.	This will increase the cost of the project.		RFP Condition prevails.
51	Ebix Cash	SLA for Payment Gateway	117	**# Description Damages (penalty)** 1 The payment gateway solution has to be up for least 99.8% of the time for 24*7 periods. **Damage (penalty)** at the rate of Rs.5,000 for every 0.1 %deviation from the SLA requirement. Financial Institution shall pay or remit the penalty amount to BMTC within 10 working days from the day of levy of damage(penalty). 2 The amount debited twice for the single performed transaction **Damage (penalty) -** Rs.100 per transaction 3 Only one unique id should be generated for a single transaction (OB number) **Damage (penalty)** - Rs.100 per transaction 4 Amount debited but ticket not issued due to PG technical issues. **Damage (penalty)** - Rs.100 per transaction 5 The amount debited in BMTC and PG site should tally. If difference **Damage (penalty) -** 5 % of the difference value 6 Any Other issues/bugs pertaining to performance of Payment Gateway **Damage (penalty)** - Rs.100 per transaction	**# Description Damages (penalty)** 1 The payment gateway solution has to be up for least **99%** of the time for 24*7 periods. **Damage (penalty)** at the rate of **Rs.10 for every 1 % deviation** from the SLA requirement. Financial Institution shall pay or remit the penalty amount to BMTC within 10 working days from the day of levy of damage(penalty). 2 The amount debited twice for the single performed transaction **Damage (penalty) - 1% per transaction** 3 Only one unique id should be generated for a single transaction (OB number) **Damage (penalty) - 1% per transaction** 4 Amount debited but ticket not issued due to PG technical issues. **Damage (penalty) - 1% per transaction** 5 The amount debited in BMTC and PG site should tally. If difference **Damage (penalty) - 1 % of the difference value** 6 Any Other issues/bugs pertaining to performance of Payment Gateway **Damage (penalty) - 1% per transaction** **As the penalities are too high, BMTC ticket size is of Rs 5-10-15, but penatiles asked in RFP are of Rs 100/- which itself doesn't quantify. We request BMTC to keep penalities in percentage and not in fixed value.**		RFP Condition prevails.

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52	Ebix Cash	H. Service Level Requirements	122	g) The total amount of penalties levied at any month would not exceed 10% of the monthly payable amount for that month with respect to each unit. h) The quality of services provided by the selected bidder would be considered to have reached 'Overall Critical Breach Level', if the total penalty applicable in a month reaches 20% of monthly amount.	We request you to please consider **maximum penalty cap as 5% of project cost.**		RFP Condition prevails.
53	Ebix Cash	H. Service Level Requirements	123	SLA 1. Implementation Phase	**The pre implementation SLAs with respect to milestones are harsh & complicated. Request you to please simplify & alter them as follows Per week penalty of Rs 5000/- beyond the defined milestones if the delay is due to bidder.**		RFP Condition prevails.
54	Chalo	12. Technical Proposal	23 - 26	TQ 1 to 4	**Consideration of Outcome-Based Technical Qualifications (TQs):** To ensure the selection of a technically proficient partner capable of delivering high-quality work, authorities are requested to incorporate operational metrics/outcomes in the Technical Qualifications (TQs). These metrics will serve as key indicators of the bidder's experience and technical expertise, demonstrating their ability to successfully execute the project.		RFP Condition prevails.
55	Chalo	Suggested TQ	-	Additional	**Suggested TQ: Digital Ticketing Metric (20 Marks)** Given one of the objectives of this tender is to promote and improve the adoption of digital ticketing solutions in buses, it is requested that the authorities assign marks based on the number of digital transactions validated on ETMs by the bidder for public buses only. Experience in digital transactions in a single project for stage carriage buses for any Indian government transport body (STUs or SPVs). Digital transactions (card, mobile, or UPI) validated on ETMs in the 3 (three) years prior to the Bid Submission Deadline date in a single project: 10,00,000 to 20,00,000: 5 marks 20,00,001 to 50,00,000: 10 marks 50,00,001 or more: 20 marks		RFP Condition prevails.
56	Chalo	Suggested TQ	-	Additional	**Suggested TQ: Offline Ticketing and Validation Capability (20 marks)** The bidder must demonstrate prior experience in implementing an electronic ticketing system that can issue and validate tickets in offline mode, ensuring seamless operations without continuous internet connectivity in public buses (STU/SPV). 1 Project: 5 Marks 2 Projects: 10 Marks 3 or More Projects: 20 Marks		RFP Condition prevails.

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57	Chalo	Suggested TQ	-	Additional	**Suggested TQ: NCMC Compliant ETIMs (20 Marks)** As one of the objective of this tender is to deploy NCMC-compliant digital ticket solutions in buses, it is essential to consider the deployment of ETIMs with the following criteria: 1. NCMC Compliant ETIMs with successful acceptance of NCMC cards Experience in providing NCMC-compliant ticketing platform for stage carriage buses for any Indian Government Transport body (STUs or SPVs) 1 Project: 5 Marks 2 Projects: 10 Marks 3 or More Projects: 20 Marks		RFP Condition prevails.
58	Chalo	Suggested TQ	-	Additional	**Suggested TQ: Experience in Digital Ticketing Modes (20 Marks)** Projects with minimum 1 year of Go-Live in implementing digital payment modes for E-Ticketing in STU/SPV in a single project in India. UPI QR code scanning - 5 Marks NCMC (National Common Mobility Card) - 5 Marks EMV contactless card payments - 5 Marks Closed-loop smart cards - 5 Marks		RFP Condition prevails.
59	Chalo	Section-4. Terms of Reference C. Scope for Work	111, 112, 115	Clause (i): ....the copy of the working software (Bespoke Software) to be handed over to BMTC along with the training at the closure of the contract. Clause (j): Point (3).....handing over of the Bespoke source code during the exit of the contract..... Clause (n): Point (6)....Complete source code of ETM Application developed for BMTC by the bidder during the entire contract period	The RFP mandates the submission of source code to the authority to ensure business continuity. As a product company, we seek to protect our intellectual property. Bus technology requirements are generally complex, and authorities seek rapid deployment at competitive rates. Building new software from scratch would be time-consuming and costly for the selected partner and hence for BMTC. To balance business continuity concerns and IP protection, we propose the following approaches: **1. Source Code Escrow Agreement:** The source code can be deposited with a neutral third-party escrow service. The authority may access the code only under predefined conditions, such as vendor insolvency, contract termination, or failure to meet performance SLAs. This ensures the authority's protection while safeguarding the vendor's proprietary rights. **2. Perpetual License Model:** Instead of transferring source code, the selected bidder can provide a non-exclusive, perpetual, fully paid-up license for continued software usage. This ensures the authority can operate the system without owning the source code.		RFP Condition prevails.

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60	Chalo	12. Technical Proposal	24	TQ 2B	**Consideration of Experience in MTUs (PQ5 and TQ2):** The current eligibility criterion restricts participation only to bidders who have supplied ETMs to State Transport Undertakings (STUs). However, several large-scale urban bus operations managed by Special Purpose Vehicles (SPVs) or Municipal Transport Undertakings (MTUs) have successfully implemented Smart ETMs, demonstrating equal or greater domain expertise. Restricting the experience only to STUs excludes qualified bidders who have implemented similar solutions in city bus operations. Example: BEST Mumbai has successfully deployed smart ETMs in 3300+ buses.		Please refer Addendum.
61	Chalo	9. Pre-Qualification Criteria	18 - 19	PQ 5	**Consideration of Experience in MTUs (PQ5 and TQ2):** The current eligibility criterion restricts participation only to bidders who have supplied ETMs to State Transport Undertakings (STUs). However, several large-scale urban bus operations managed by Special Purpose Vehicles (SPVs) or Municipal Transport Undertakings (MTUs) have successfully implemented Smart ETMs, demonstrating equal or greater domain expertise. Restricting the experience only to STUs excludes qualified bidders who have implemented similar solutions in city bus operations. Example: BEST Mumbai has successfully deployed smart ETMs in 3300+ buses.		Please refer Addendum.
62	Chalo	9. Pre-Qualification Criteria	19	PQ 6: No Blacklisting	**Following language shall be added to PQ 6 to ensure the selection of financially stable and credible bidders. Requiring a Chartered Accountant-vouched undertaking confirming no financial defaults in the past three years will help mitigate project risks:** The Prime Bidder and its consortium partner shall submit an undertaking, duly vouched by a Chartered Accountant, confirming that the **Bidder, its parent company, or any of its subsidiaries have not defaulted financially/declared bankrupt in the last three years, either in India or abroad.**		RFP Condition prevails.
63	Chalo	Section-4. Terms of Reference H. Service Level Requirements		2. O&M Phase - Overlaping SLA 1, 2, 3, 6 & 8	All these SLAs are linked together, failure in one will lead to another. We request the inclusion of a single SLA stating that the unavailability of ETIM, for any reason, should be duly considered. This will ensure clarity and consistency in performance evaluation.		RFP Condition prevails.
64	Chalo	17. Format and Signing of Proposal	28	Point (a): The Proposal, and its copy, shall be typed or written in indelible ink and signed by the authorized signatory of the bidder who shall initial each page, in blue ink.	Considering the increasing adoption of digital processes, will the authority accept proposals that are digitally signed using a Digital Signature Certificate (DSC) instead of physically signing each page in blue ink? Please confirm if this mode of submission is permissible.		RFP Condition prevails.

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65	Chalo	Suggested Payment Method		Additional	The Selected Bidder shall retain the fare collected through digital payment mediums up to the amount of the service fees payable to the Bidder. After daily revenue reconciliation, any excess amount shall be remitted to the designated account of NWKRTC. To ensure timely payments and financial sustainability, an escrow account shall be established to collect digital fare payments from passengers, similar to the BEST Mumbai model. Through this escrow mechanism, a minimum daily or monthly payment (e.g., 90% of the billed amount) shall be made to the Selected Bidder. Authorities may retain a certain percentage (e.g., 10% of the billing amount) to cover potential penalties or adjustments." Justification: 1. Ensures timely payments, mitigating financial strain on the service provider. 2. Enhances project efficiency and long-term sustainability. 3. Reduces administrative overhead by minimizing frequent paperwork. 4. Facilitates seamless operations and business continuity. Given the project's scale and financial requirements, a structured payment mechanism is essential to maintain cash flow and service quality. It is kindly requested to the authorities to consider incorporating this clause into the tender.		RFP condition prevails
66	OMNIFICENT TECHNOLOGIES PVT LTD	Experience in ETM ticketing and Web based centralized fare collection application and Digital Payment	Addendum pg 4 & 5	The bidders should have supplied and implemented at least a total of 2500 Nos. of ETMs enable with any mode of digital payment to State Transport undertaking in India over the last five (5) years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders & Successfully supplied and implemented ETIM enabled with any mode of digital payment over the last five years (2019-20, 2020-21, 2021-22, 2022-23, 2023-24) in single or in maximum of three orders.	Since corporation has accepted experience of any kind of ETIMs experience for participation. We kindly request that the corporation provide an additional technical mark for experience with live project of Android ETMs.		Please refer Addendum.
67	Pine Labs	NCMC				a) Experience Points should be added. b) MDR should be clarified. This will be paid by the passenger or by the Corporation.	During implementation of NCMC it will be intimated.

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68	OMNIFICENT TECHNOLOGIES PVT LTD	Point d : Mobile App & scope of work	Page 97 & pg 109	A mobile app compatible with Android and iOS to be developed for viewing the Dashboard with all functionalities. The successful bidder shall develop and deploy the mobile app as per the requirements and suggestions of all user departments of BMTC & When BMTC desires to implement AFCS or any other IT project or additional Mobile App or upgrade the Depot Application during the enΘre contract period, the vendor shall provide necessary software support including development & integration of forms, reports, database procedures, EMS, interface application, ETM firmware etc. to meet the business requirements in in time.	Since there is no weightage or additional technical marks provided for experience in mobile Ticketing, we kindly request the corporation to provide additional technical marks for experience in Mobile Ticketing.		RFP Condition prevails.
69	OMNIFICENT TECHNOLOGIES PVT LTD	Payment terms & condition	Page 123 & Addendum pg 108	Point 5: Selected bidder shall be responsible for integrating with existing AVLS application, payment gateway, validation of smart cards, NCMC cards and smart tickets, UPI payment as per BMTC requirements and futuristic IT projects.	Since integration of Smart cards and NCMC cards is part of the requirement. We kindly request the corporation to provide additional marks under the Technical Qualification (TQ) criteria for experience of Smart cards/ NCMC cards experience.		RFP Condition prevails.